What is Claimed is:

 A polymer compound containing monomer units represented by formulas (I) to (III):

$$\begin{array}{c} \begin{array}{c} \begin{array}{c} P_1 \\ \\ CH_2 - C \\ \end{array} \end{array} \\ \begin{array}{c} C \\ C \\ \end{array} \\ \begin{array}{c} C \\ CH_2 - CH_2 - O \\ \end{array} \\ \begin{array}{c} O \\ P \\ \end{array} \\ \begin{array}{c} (1) \\ \end{array} \\ \end{array}$$

$$-\left(CH_{2}-\overset{\overline{R}_{2}}{C}\right)_{m}$$

$$-\overset{\overline{C}}{C}OX^{+}$$

$$\begin{array}{c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

wherein each of  $R_1$  to  $R_4$  is hydrogen and/or a methyl group; p represents an integer between 1 to 10 inclusive; X represents hydrogen, an alkali metal, or an ammonium represented by formula (1):

$$\begin{array}{c} R_{5} \\ R_{8} \text{-} N \text{-} R_{6} \\ R_{7} \end{array} \tag{1}$$

wherein each of  $R_5$  to  $R_6$  represents hydrogen, a C1-C3 alkyl group, or a C1-C3 alkanol group; and a plurality of Xs may be

the same or different from one another,

the compositional proportions of the monomer units falling within the following ranges:

2 mol%  $\leq$  1  $\leq$  73 mol%; 8 mol%  $\leq$  m  $\leq$  83 mol%; and 15 mol%  $\leq$  n  $\leq$  80 mol%.

- 2. A polymer compound according to claim 1 also containing a monomer unit other than monomer units represented by formula (I) to (III) in an amount of 10 mol% or less.
- 3. A method of producing a polymer compound containing monomer units represented by formula (I) to (III):

$$\begin{array}{c} - \begin{pmatrix} \mathsf{R}_2 \\ \mathsf{C} \\ - \end{pmatrix}_m \\ \mathsf{C} \\ - \mathsf{O} \\ \mathsf{X}^\dagger \\ \mathsf{O} \\ \end{array} \tag{II})$$

$$\begin{array}{c} \begin{array}{c} \begin{array}{c} R_{3} \\ - \left( CH_{2} - C - \right)_{n} \\ \end{array} & \begin{array}{c} O \\ O - CH_{2} - CH - CH_{2} - O - C - C = CH_{2} \\ \end{array} \end{array} \right)$$

wherein each of R<sub>1</sub> to R<sub>4</sub> is hydrogen and/or a methyl group; p

represents an integer between 1 to 10 inclusive; X represents hydrogen, an alkali metal, or an ammonium represented by formula (1):

$$\begin{array}{c} R_{5} \\ R_{8} \text{-} N \text{-} R_{6} \\ R_{7} \end{array} \tag{1}$$

wherein each of  $R_5$  to  $R_8$  represents hydrogen, a C1-C3 alkyl group, or a C1-C3 alkanol group; and a plurality of Xs may be the same or different from one another, and the compositional proportions of the monomer units falling within the following ranges: 2 mol%  $\leq$  1  $\leq$  73 mol%; 8 mol%  $\leq$  m  $\leq$  83 mol%; and 15 mol%  $\leq$  n  $\leq$  80 mol%,

which method comprises adding glycidyl (meth)acrylate in a predetermined amount to a copolymer comprising at least (meth)acrylic acid and at least one of 2-hydroxyethyl (meth)acrylate and polyoxyethylene mono(meth)acrylate.

- 4. A method of producing a polymer compound according to claim 3, wherein at least one of an N-nitrosophenylhydroxylamine ammonium salt and 4-hydroxy-2,2,6,6-tetramethylpiperidin-1-oxyl is employed as a polymerization inhibitor.
- A photosensitive composition containing, as a component, a polymer compound as recited in claim 1.
- A photosensitive composition according to claim 5, which contains water as a solvent.
- A photosensitive composition according to claim 5, which contains a polymerizable monomer.

- 8. A photosensitive composition according to claim 5, which contains a colorant.
- 9. A photosensitive composition according to claim 5, which contains at least one of a photopolymerization initiator and a photosensitizer.
- 10. A pattern formation method comprising forming a coating film by use of a photosensitive composition as recited in claim 5 and developing by use of water; i.e., a neutral developer.